					T	_	
Form PTC	1440	U.S. Department of (Cammarca	Atty. Docket No.	Serial N	1:10/7	U,905
	(Rev. 2-32) Patent & Trademark Office		A8630		Not Ye	Assigned	
INFO		ON DISCLOSURE STATI everal sheets if necessary)	EMENT	Applicant: Lester F. LUDWIG, et al.			
				Filing Date: November 1, 2000	Group:	Assigned	2152
			U.S. PATE	NT DOCUMENTS	1 32		
Examin	er	Document Number	Date	Name	Class	Sub-	Filing Date
Initial						Class	(if appropriate)
		3,723,653	3/27/73	Tatsuzawa	1 -		
		3,873,771	3/25/75	Kleinerman et al.			· · · · · · · · · · · · · · · · · · ·
		3,974,337	8/10/76	Tatsuzawa			
		4,005,265	1/25/77	Verhoeckx, et al.	-		
		4,054,908	10/18/77	Poirier et al.		_	-
		4,210,927	7/1/80	Yumde, et al.	-		
		4,441,180	4/3/84	Schussler, et al.			
		4,451,705	5/29/84	Burke et al.		-	
		4,475,193	10/2/84	Brown		_	****
		4,516,156	5/7/85	Fabris, et al.	1 —	_	
		4,529,839	7/16/85	Colton, et al.		-	
		4,529,840	7/16/85	Colton et al.			
		4,531,024	7/23/85	Colton, et al.			
V		4,574,374	3/4/86	Scordo			
							
^ <i>X</i>	L	4,645,872	2/4/87	Pressman, et al.			
				Pressman, et al. TENT DOCUMENTS			
				TENT DOCUMENTS	Class	Sub-	Translation
			FOREIGN PA		Class	Sub- class	Translation Yes/No
		Document 0 041 902	FOREIGN PA	TENT DOCUMENTS	Class	Sub- class	Translation Yes/No
		Document	FOREIGN PA	TENT DOCUMENTS Country	Class		
		Document 0 041 902	FOREIGN PA Date 12/16/81	TENT DOCUMENTS Country EP	Class		
		Document 0 041 902 0 190 060	FOREIGN PA* Date 12/16/81 8/6/86 2/14/90	Country EP EP EP	Class		
		Document 0 041 902 0 190 060 0 354 370 35 07 152	FOREIGN PA* Date 12/16/81 8/6/86 2/14/90 8/29/85	Country EP EP EP DE	Class		
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118	TOREIGN PA' Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90	Country EP EP EP DE EP	Class		
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222	TOREIGN PA' Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91	Country EP EP EP DE EP EP EP	Class		
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345	FOREIGN PA' Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91	Country EP EP EP DE EP EP EP EP EP	Class		
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128	FOREIGN PA' Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91	Country EP EP EP DE EP EP EP EP EP EP	Class		
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022	FOREIGN PA' Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92	Country EP EP EP DE EP EP EP EP EP EP EP	Class		
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371	FOREIGN PA' Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92	Country EP EP EP DE EP EP EP EP EP EP EP EP EP		class	
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN	TOREIGN PA Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including	Country EP EP EP DE EP	tinent Pages	class	Yes/No
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: S	TOREIGN PA Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and See	Country EP EP EP DE EP	tinent Pages	class	Yes/No
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: SCommunications, 1988 In	Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and Senternational Zumannal	Country EP EP EP DE EP Ervices, C. Crawford, F. Marich Seminar.	tinent Pages Milone, D. Z	class Class Class Coppellaro, D	Yes/No
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: S Communications, 1988 I Marskak, Ronni T. "Beyon	Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and Senternational Zurond Mail for W	Country EP	tinent Pages Milone, D. Z	class Class Coppellaro, D Coppellaro, D	Yes/No igital on". Patricia
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: S Communications, 1988 I Marskak, Ronni T. "Beyo Seybold's Office Compu	Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and Senternational Zurond Mail for Witing Report, Se	Country EP	tinent Pages Milone, D. Z	class Line Compellaro, D led application Computer S	Yes/No igital on", Patricia
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: S Communications, 1988 I Marskak, Ronni T. "Beyo Seybold's Office Compu	Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and Senternational Zurond Mail for Wing Report, SeArchitecture for	Country EP	tinent Pages Milone, D. Z e mail-enab et copy from	class Coppellaro, D Coppellaro, D Computer S Etherphone	Yes/No igital on", Patricia
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: S Communications, 1988 I Marskak, Ronni T. "Beyo Seybold's Office Comput Rangan et al. "Software A Journal on Selected Area	Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and Senternational Zurond Mail for Wing Report, Searchitecture for of Communications)	Country EP	tinent Pages. Milone, D. Z e mail-enab ext copy from rivices in the pp. 1395-14	class Coppellaro, D Coppellaro, D Computer S Etherphone 404.	yes/No igital on", Patricia elect 1992 CD). System," IEEE
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: S Communications, 1988 I Marskak, Ronni T. "Beye Seybold's Office Computed Rangan et al. "Software A Journal on Selected Area ACM Press, Conference of the state of the selected Area and the selected Area an	Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and Senternational Zurond Mail for Wing Report, Searchitecture for of Communications)	Country EP	tinent Pages. Milone, D. Z e mail-enab ext copy from rivices in the pp. 1395-14	class Coppellaro, D Coppellaro, D Computer S Etherphone 404.	yes/No igital on", Patricia elect 1992 CD). System," IEEE
		Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: S Communications, 1988 II Marskak, Ronni T. "Beyo Seybold's Office Comput Rangan et al. "Software A Journal on Selected Area ACM Press, Conference of	Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and Senternational Zurond Mail for Wing Report, Searchitecture for of Communication Organization)	Country EP	tinent Pages. Milone, D. Z e mail-enab ext copy from rivices in the pp. 1395-14	class Coppellaro, D Coppellaro, D Computer S Etherphone 404.	yes/No igital on", Patricia elect 1992 CD). System," IEEE
EXAMINE	2:	Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: S Communications, 1988 II Marskak, Ronni T. "Beye Seybold's Office Computed Rangan et al. "Software A Journal on Selected Area ACM Press, Conference of 1991. The American Users Form	Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and Senternational Zurond Mail for Wing Report, Searchitecture for of Communication Organization)	Country EP	tinent Pages Milone, D. 2 The mail-enable to copy from the copy from the pp. 1395-14 SIGOIS Bu	class Class Compellaro, D Coppellaro, D Computer S Etherphone 404. Computer S Etherphone	yes/No igital on", Patricia elect 1992 CD). System," IEEE
EXAMINE	R:	Document 0 041 902 0 190 060 0 354 370 35 07 152 0 403 118 0 414 222 0 436 345 0 453 128 0 497 022 0 516 371 OTHER DOCUMEN Videomatic Switching: S Communications, 1988 II Marskak, Ronni T. "Beyo Seybold's Office Comput Rangan et al. "Software A Journal on Selected Area ACM Press, Conference of	Date 12/16/81 8/6/86 2/14/90 8/29/85 12/19/90 2/27/91 7/10/91 10/23/91 8/5/92 12/2/92 NTS (Including Systems and Senternational Zurond Mail for Wing Report, Searchitecture for of Communication Organization)	Country EP	tinent Pages Milone, D. 2 The mail-enable to copy from the copy from the pp. 1395-14 SIGOIS Bu	class Coppellaro, D Coppellaro, D Computer S Etherphone 404.	yes/No igital on", Patricia elect 1992 CD). System," IEEE

Sheet 2 of 7

Form PTO-1449 (Rev. 2-32)	tev. 2-32) Patent & Trademark Office		Atty. Docket No. A8680	Serial N	Serial No. 10 721, 905 Not Yet Assigned		
	FION DISCLOSURE STAT e several sheets if necessary)		Applicant: Lester F. LUDWIG, et al.				
		Filing Date: November 1, 2000	Group:	2152			
		U.S. PAT	ENT DOCUMENTS				
Examiner Initial	Document Number	Date	Name	Class	Sub- Class	Filing Date (if appropriate)	
	4,650,929	3/17/87	Boerger et al.	—		(ii appropriate)	
~	4,653,090	3/24/87	Hayden		 		
	4,686,698	8/11/87	Tompkins et al.		=		
	4,710,917	12/1/87	Tomkins, et al.			· 	
	4,716,585	12/29/87	Tompkins et al.				
	4,796,293	1/3/89	Blinken et al.				
	4,817,018	3/28/89	Cree et al.	12	-		
	4,837,798	6/6/89	Cohen, et al.				
	4,847,829	7/11/89	Tompkins et al.				
	4,888,795	12/19/89	Ando et al.				
	4,922,523	5/1/90	Hashimoto			"	
	4,931,872	6/5/90	Stoddard et al.				
	4,953,159	8/28/90	Hayden et al.		F _ 1		
	4,961,211	10/2/90	Tsugane, et al.		_		
	4,965,819	10/23/90	Kannes				
		FOREIGN PA	ATENT DOCUMENTS				
	Document	Date	Country	Class	Sub- class	Translation Yes/No	
- 30	0 523 618	1/20/93	EP		-	100110	
	0 535 601	4/7/93	EP				
	0 523 626	1/20/93	EP				
	0 548 597	6/30/93	EP				
	0 561 381	9/22/93	EP			· · · · · · · · · · · · · · · · · · ·	
1	0 604 053	6/29/94	EP			- • • • • • • • • • • • • • • • • • • •	
	WO 94/24803	10/27/94	PCT	1	-		
6	WO 92/21211	11/26/92	PCT				
	OTHER DOCUME	NTS (Includin	g Author, Title, Date, Pe	rtinent Pages	Etc.)		
2	Bellcore News, "IMAL						
7	Frontiers in computer of	ommunication	technology, Sigcom '87	Workshop	Aug 11 12	1007)	
			ages for 'login,' 'htmp,'				
]]	http://www.de.freebds.c		eges tot tokur' tiruth'	war, and	WIIO. UIIII	ie micinei:	
- /			Describing Product Deve	lonment			
- / - 	AHUIA et al "Coordir	ation and Con	trol of Multimedia Confe	rencina " IE	FF Commi	ication Magazine	
/ I	30(5): 38-42, May 199			······································		noanon wagazuic,	
			ents of the Rapport Multi	imedia Confe	erencino Sve	tem." INFOCOM '88	
_/.	IEEE, pp. 746-751, 198						
7			ig of Meetings: A Case S	Study in Prot	otyping Dist	ributed Application."	
<u>_X</u>	System Integration, 199	2 2nd Internation	nal Conference.	,	· · / F O mu	a	
XAMINER:	h pint		DATE CONSIDERE	D: 7/1	105		
EXAMINER: EXAMINER: In conformance	System Integration, 199	2 2 nd Internation	nal Conference. DATE CONSIDEREI itation is in conformance	D: 7/6	105		

المستحدث والمراجع			_	- 4		Sheet 3 of 7
E PCC 1440	TIC Descriptions of	C	Atty. Docket No.	Serial ?	No. 101 -	771 95
F rm PTO-1449 (Rev. 2-32)	U.S. Department of Patent & Trademar	A8680	Not Yet Assigned			
	ON DISCLOSURE STAT several sheets if necessary)	EMENT	Applicant: Lester F. LUDWIG, et al.			
		Filing Date: November 1, 2000	Group:	Assigned	2152	
		NT DOCUMENTS				
Examiner Initial	Document Number	Date	Name	Class	Sub- Class	Filing Date (if appropriate)
A	4,977,520	12/11/90	McGauhey et al.			(2 2)
	4,987,492	1/22/91	Stults, et al.			
	4,995,071	2/19/91	Weber, et al.	\		
	4,998,243	3/5/91	Kao			
	5,003,532	3/26/91	Ashida, et al.			
	5,010,399	4/23/91	Goodman, et al.			
	5,014,267	5/7/91	Tompkins et al.	<u> </u>		
	5,027,400	6/25/91	Baji, et al.	<u> </u>		
	5,042,062	8/20/91	Lee, et al.	<u> </u>		
	5,056,136	10/8/91	Smith			
	5,072,442	12/10/91	Todd			
	5,073,926	12/17/91	Suzuki et al.			
	5,099,510	3/24/92	Blinken, Jr., et al.	<u> </u>		
	5,130,399	7/14/92	Ikeno et al.			
~	5,130,793	7/14/92	Bordry, et al.			
		FOREIGN PA	TENT DOCUMENTS			•
	Document	Date	Country	Class	Sub- class	Translation Yes/No
		 		 	 	
				 	 	
		 		· · · ·	 	
					 	
				 	├───	
	OTHER DOCUME	NTS (Including	Author, Title, Date, Per	tinent Dager	Eta \	
-81	COHEN et al., "Audio V					ironments, " pp. 479-
	COHEN et al., "Audio V	Vindows for Ri	naural Telecommunicati	on" EIC T	alara (10/01	`
/-	COHEN et al., Design au	nd Control of S	hared Conferencing Env	ironmente f	okyo (10/91)
/ /	Proceedings of the Secon	nd Int'l Sympo	sium on Measurement ar	nd Control R	chotics (ISM	ICR '92) Tsukuba
	Science City, Japan, (N	ovember 15-19), 1992), pp. 405-412.			.01()2), 1544054
	COHEN et al., "Exocent Fundamentals, Vol. E75	ric Control of A	Audio Imaging in Binaur	al Telecomr	nunication,"	IEICE Trans.
	COHEN et al., "Multidir			L" Int'l Jour	nal of Man-N	Aachine Studie, Vol.
	34:319-336 (1991).		_			-
	COHEN et al., "Multidir	nensional Audi	o Windows: Conference	Concerts a	nd Cocktails	" Human Factors
	Society Meeting, SF, CA	, pp. 1-15, Jun	e 12, 1991.	_		
	ENSOR et al., "The Rap Conference, IEEE, pp. 5	2-58, 1988.			•	•
	GOPAL et al., "Director	ies of Networks	with Causally Connecte	d Users," I	EEE, pp. 106	60-1064, 1988.
	HORN et al., "An ISDN on Computer and Comm	Multimedia Co	inference Bridge," TENC	ON '90 - 1	990 IEEE Re	egion 10 Conference
EXAMINER:	D. DIM		DATE CONSIDERED	: 7/1/	05	
EXAMINER: Initi	al if citation considered, what not considered. Include o	ether or not cit	ation is in conformance	with MPEP		ne through citation if

Sheet 4 of 7

				- 4		Sheet 4 of
F rm PTO-1449	U.S. Department of Commerce Patent & Trademark Office		Atty. Docket No.	Serial No. 10/721, 905 Not Yet Assigned		
(Rev. 2-32)			A8680			
	ON DISCLOSURE STAT several sheets if necessary)	EMENT	Applicant: Lester F. LUDWIG, et al.			
	<u></u>		Filing Date:	Group:		
			November 1, 2000	Not Yo	+ Assigned	2152
		U.S. PATI	ENT DOCUMENTS			
Examiner Initial	Document Number	Date	Name	Class	Sub- Class	Filing Date (if appropriate)
	5,130,801	7/14/92	Yamaguchi		-	
	5,155,761	10/13/92	Hammond	<u> </u>		
	5,157,491	10/20/92	Kassatly			
	5,170,427	12/8/92	Guichard, et al.		-	
/	5,195,086	3/16/93	Baumgartner et al.	345	329	
	5,195,087	3/16/93	Bennett et al.			
	5,200,989	4/6/93	Milone			
	5,202,828	4/93	Vertelney et al.	345	326	
	5,202,957	4/13/93	Sеrrao			
	5,218,627	6/8/93	Corey, et al.			
	5,224,094	6/29/93	Maher et al.			
	5,231,492	7/27/93	Dangi et al.			
- X	5,239,466	8/24/93	Morgan et al.	<u> </u>		
- </td <td>5,253,362</td> <td>10/12/93</td> <td>Nolan et al.</td> <td>1</td> <td></td> <td></td>	5,253,362	10/12/93	Nolan et al.	1		
	5,260,941	11/9/93	Wilder et al.	<u> </u>		
\smile		FOREIGN PA	TENT DOCUMENTS			
	Document	Date	Country	Class	Sub- class	Translation Yes/No
			<u> </u>			
	- 	 	 			
			 			
		L	<u> </u>			
	OTHER DOCUME	VTS (Including	Author, Title, Date, Per	tinent Pages	, Etc.)	
<u> </u>	KAMEL, "An Integrated	Approach to	Share Synchronous Grou	pware Work	spaces," IEE	E 1993.
	Evanston, IL 60201.	lating the Cue	of Spatial Hearing in Na	tural Enviro	nments," No	thwestern University,
.	KLEIN, Telecommunika Erlangen, W. Germany.	tion von Ange	sichtzu Angesicht 2323	Telcom Rep	ort 9 (1986) S	Sept./Okt., No. 5,
	KOBAYASHI et al., "De	velopment and	d Trial Operation of Vide	o Teleconfe	rence System	," IEEE Globecom,
	pp. 2060-2063, 1999. LAKE et al., "A Network	Environment	for Studying Multimedia	a Network A	rchitecture a	nd Control." (1989
	Globecom).	_ ·				
	LANTZ, An Experiment University, Stanford, CA	in Integrated N 94305, Dec. 1	Multimedia Conferencing 986.	g, Departmer	nt of Comput	er Science, Stanford
	LANTZ et al., Collabora	tion Technolog	gy Research at Olivetti S	earch Califo	rnio August	1000
	LAUWERS et al., Replic	ated Architech	ure for Shared Window	Systems A	Criticus (O)	uetti Decemb
	Lamonia) Version of Ap	ומכ 1990.				·
	LAUWERS et al., Collab Next Generation of Share	oration Aware	ness in Support of Colla	boration Tra	nsparency: R	equirements for the
	LEUNG et al., Optimum	Connection Pa	ths for a Class of Videoc	conferences	Department	of Information
XAMINER:	Engineering, the Chinese	University of	Hong Kong, Shatin, Hon DATE CONSIDERED			
			-	- 	<u> </u>	
XAMINER: Initiate to the conformance and the c	al if citation considered, who d not considered. Include c	ether or not cit	ation is in conformance to	with MPEP	609; draw lin	e through citation if

					_	Sheet 5 of		
D 200 1440	IIC Damandan and a C	0.	Atty. Docket No.	Serial 1	اه. ا ^{ها}	1721,905		
Form PTO-1449 (Rev. 2-32)	·····		A8680	Not Yet Assigned				
	TION DISCLOSURE STATI e several sheets if necessary)	EMENT	Applicant: Lester F. LUDWIG, et al.					
			Filing Date:	Group:				
			November 1, 2000	Nor Ye	t Assigned	2482		
		U.S. PATE	ENT DOCUMENTS					
Examiner Initial	Document Number	Date	Name	Class	Sub- Class	Filing Date (if appropriate)		
∞ (S)	5,283,637	2/1/94	Goolcharan					
	5,303,343	4/12/94	Ohya et al.					
	5,315,633	5/24/94	Champa					
	5,319,795	6/7/94	Hamabe et al.					
	5,333,133	7/26/94	Andrews et al.		<u> </u>			
	5,333,299	7/26/94	Kovai et al.					
	5,335,321	8/2/94	Harney et al.					
	5,345,258	9/6/94	Matsubara et al.					
	5,351,276	9/27/94	Doll Jr. et al.					
	5,353,398	10/4/94	Kitahara et al.			· · · · · · · · · · · · · · · · · · ·		
	5,363,507	11/8/94	Nakayama et al.					
	5,365,265	11/15/94	Shibata et al.					
/-	5,367,629	11/22/94	Chu et al.					
	5,373,549	12/13/94	Bales et al.					
	5,374,952	12/20/94	Flohr					
		FOREIGN PA	TENT DOCUMENTS					
	Document	Date	Country	Class	Sub- class	Translation Yes/No		
				1				
						· · · · · · · · · · · · · · · · · · ·		
	OTHER DOCUME	NTS (Including	Author, Title, Date, Per	tinent Pages	Etc.)			
0	MAENO et al., Distribut					Communicatoin		
	Architecture, The Transa Sept., No. 9, Tokyo, JP	ections of the L	nstitute of Electronics, Ir	iformation a	nd Comm. E	ngineers E74 (1991)		
	MARTENS, "Principal (Components A	nalysis and Resysnthesis	of Spectral	Cues to Perce	eived Directoin,"		
	Proceedings of the 1987 MASAKI et al., "A Desk	Int'l Computer top Teleconfer	r Music Conference, Nor rencing Terminal Based	thwestern U	niversity, Ev	anston, IL 60201		
/ 1	85, 1992	,		08 D 10D1 (,		1 10010W, 4(4) .01°		
	NG et al., Systems Integr	ration '90, (Ap	ril 23-26, 1990).	·				
	NUNOKAWA et al., "To			d Electronic	OHP." IEEE	1988		
	OHMORI et al., "Distrib	uted Cooperati	ive Control for Sharing A	pplications	Based on Mu	ultipaty and		
	Multimedia Desktop Cor	OHMORI et al., "Distributed Cooperative Control for Sharing Applications Based on Multipaty and Multimedia Desktop Conferencing System," IEEE, 1992.						
	PATE, "Trends in Multir 1990.	nedia Applicat	ions and the Network M	odels to Sup	port Them,"	Globecom's 90:		
	PERKINS, "Spider: An	investigation is	n collaborative technolog	ies and their	r effects on n	etwork performance"		
7	RAMANATHAN et al., (Optimal Comm	nunication Architectures	for Multime	dia Conferen	cing in Distributed		
	Systems, Multimedia Lat Jolla, CA.	coratory Dept.	of Computer Science and	d Engineerin	g, University	of San Deigo, La		
EXAMINER:	P. DINH		DATE CONSIDERED	: 7/1/	ox.			
EXAMINER: In	nitial if citation considered, wh and not considered. Include c	ether or not cit	ation is in conformance	with MPEP	609; draw lin	e through citation if		

Form PTO-1449 U.S. Department of Commerce Rev. 2-32) Patent & Trademark Office			Atty. Docket No. A8680	Serial N	10/	721,905 1Assigned		
	TON DISCLOSURE STATI several sheets if necessary)		Applicant: Lester F. LUDWIG, et al.					
			Filing Date: November 1, 2000					
		U.S. PAT	ENT DOCUMENTS					
Examiner Initial	Document Number	Date	Name	Class	Sub- Class	Filing Date		
2	5,375,068	12/20/94	Palmer et al.	+	Class	(if appropriate)		
	5,379,374	1/3/95	Ishizaki et al.	+				
				1				
	5,382,972	1/17/95	Kannes	+-				
+	5,384,598	1/24/95	Rodriguez et al.					
	5,384,772	1/24/95	Marshall	7				
	5,392,223	2/21/95	Caci					
	5,392,346	2/21/95	Hassler et al.					
	5,404,435	4/4/95	Rosenbaum					
	5,408,526	4/18/95	McFarland, et al.					
	5,408,662	4/18/95	Katsurabayashi					
	5,422,883	6/6/95	Hauris et al.	 				
	5,432,525	7/11/95	Maruo et al.					
	5,444,476	8/22/95	Conway	+	-			
- - - - - - - - - - 	5,471,318	11/28/95	Ahuja et al.	+-				
	5,473,679	12/5/95	La Porta et al.	+ = 7	=			
			ATENT DOCUMENTS					
	Document	Date	Country	Class	Sub-	Translation		
.			- Commany		class	Yes/No		
			 	+	CIASS	162110		
			 	+				
			 	+				
			 	+				
		 	 	4				
	<u> </u>			 				
			<u> </u>	 				
				4				
فيستوارين والأرادة	OTHER DOCUMEN	VTS (Including	g Author, Title, Date, Peri	tinent Pages.	Etc.)			
R	RANGAN et al., "Softwa	are architecture	e for integration of video	services in t	he etherphor	ie system," IEEE J.		
	on Selected Areas in Comm., 9(9):1395-1404, Dec. 91.							
/ [Conference (1992).	RANGAN et al., "A Window-Based Editor for Digital Video and Audio," System Sciences, 1992 Hawaii Int						
	CAKATA "BICDNIM	-taidia Wa-						
	SAKATA, "B-ISDN Mu	ilumedia wois	estation Architecture, ir	EE, 1993.				
1 1	SAKATA et al., "Develo	pment and Ev	aluation of an In-House n	Aultimedia D	esktop Conf	erence System,"		
	NEC Research & Develo	pment, no. ys.	pp. 107-117, July 1990.					
	STEFIK et al., "Beyond t	he Chalkboard	1: Computer Support for	Collaboratio	n and Proble	m Solving,"		
	Communications of the A	CM, Vol. 30,	No. 1, Jan. 1987.					
	VIN et al., Hierarchical Conferencing Architectures for Inter-Group Multimedia Collaboration Multimedia							
	VIN et al., Hierarchical (oniciencing !	Laboratory Department of Computer Science and Engineering University of California at San Diego, I.					
	Laboratory Department o	of Computer Sc	cience and Engineering U	niversity of	California at	`San Diego, La Jolli		
	VIN et al., Multimedia Co	of Computer Sc	cience and Engineering U	Iniversity of ment, Compu	California at ter Magazin	San Diego, La Jolla e, Vol. 24, Issue 10		
	VIN et al., Multimedia Copp. 69-79, 1991.	of Computer Sc	cience and Engineering U	Iniversity of ment, Compu	California at uter Magazin	San Diego, La Jolli re, Vol. 24, Issue 10		
XAMINER:	VIN et al., Multimedia Co	of Computer Sc	cience and Engineering U	ment, Compu	California at uter Magazin	San Diego, La Joll ie, Vol. 24, Issue 10		

Form PTO-1449 (Rev. 2-32)		U.S. Department of Commerce Patent & Trademark Office		Serial N	10/	721,905 Assigned	
	TION DISCLOSURE STAT to several sheets if necessary)	Applicant: Lester F. LUDWIG, et al.					
			Filing Date: November 1, 2000	Group: Not Yes			
		U.S. PATE	ENT DOCUMENTS				
Examiner Initial	Document Number	Date	Name	Class	Sub- Class	Filing Date (if appropriate)	
<3	5,475,421	12/12/95	Palmer et al.				
	5,485,504	1/16/96	Ohnsorge	 			
	5,491,695	2/13/96	Meagher et al.	T			
	5,506,954	4/9/96	Arshi et al.		 1		
	5,515,491	5/7/96	Bates et al.				
	5,526,024	6/11/96	Gaglianello et al.				
	5,550,966	8/27/96	Drake et al.		——————————————————————————————————————		
	5,553,222	9/3/96	Milne et al.				
1	5,561,736	10/1/96	Moore et al.				
	5,565,910	10/15/96	Rowse et al.				
	5,581,702	12/3/96	McArdle				
	5,590,128	12/31/96	Maloney, et al.		-	· · · · · · · · · · · · · · · · · · ·	
	5,594,495	1/14/97	Palmer et al.				
	5,602,580	2/11/97	Tseng				
	5,608,653	3/4/97	Palmer et al.	 			
1/	5,689,553	11/18/97	Ahuja et al.				
\mathcal{L}	5,864,844	1/99	James et al.	707	4		
		FOREIGN PA	TENT DOCUMENTS				
	Document	Date	Country	Class	Sub-	Translation	
					class	Yes/No	
· ·							
		<u> </u>	<u> </u>				
	OTHER DOCUME	NTS (Including	Author, Title, Date, Pe	rtinent Pages	, Etc.)		
2	WATABE et al., "A Dis					echire." IEEE, 1991.	
	WATABE et al., "Distri 1991.						
	WEISS, Desk Top Vide West Germany.	o Conferencing	g - An Important Feature	of Future V	isual, SIEMI	ENS AG - Munich -	
	ZELLWEGER et al., "A Conference, 1988.	n Overview of	the Etherphone System	and Its Appl	ications," Co	mputer Workstations	
EXAMINER:	j. 12/M		DATE CONSIDERE	D: 7/1/	N.		
EXAMINER: I	nitial if citation considered, when and not considered. Include	hether or not ci	tation is in conformance	with MPEP	609; draw lii	ne through citation if	